

## Studies on Homalomeneae (Araceae) of Borneo XI: *Homalomena matangae*, a new species from Sarawak, Malaysian Borneo

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*Studi sulle Homalomeneae (Araceae) del Borneo XI: Homalomena matangae, nuova specie del Sarawak, Borneo Malesiano* — Viene descritta ed illustrata la nuova specie **Homalomena matangae** Y.C. Hoe, S.Y. Wong & P.C. Boyce, endemica del massiccio quarzifero del Matang, provincia Kuching, nord-ovest del Sarawak, Borneo malesiano, regione in cui Odoardo Beccari la raccolse per la prima volta durante la sua ascesa del Matang.

**Key words:** Araceae, Borneo, Malaysia, *Homalomena*, Sarawak.

### Introduction

Among the 16 sheets and single line drawing of Bornean *Homalomena* in the Herbarium Beccarianum-Malesia (FI-B), *O. Beccari* P.B. 1783 [Sarawak, Kuching, Matang, May 1865] represents a highly distinctive novel species with broadly cordiform leaves with only few primary lateral veins per side, and with a spathe in which the lower part, below the constriction, exceeds the length of the spathe limb.

In common with much of Beccari's collections, P.B. 1783 [*Piante Bornensi* 1783] is in an excellent

state of preservation. However, it has been pressed with the spathe closed, obscuring critical details of the spadix. Fortunately being very distinctive in overall appearance, and furthermore originating from an area for which there exist reliable records of Beccari's routes (Beccari 1902, 1904, 1921, 1987; Steenis, 1952; Pichi-Sermoli & Steenis, 1983; [www.nationaalherbarium.nl/FMCollectors/B/BeccariO](http://www.nationaalherbarium.nl/FMCollectors/B/BeccariO)), we decided to attempt to refind the plant in habitat. This proved remarkably simple; during our first fieldwork day we located significant populations of what is without doubt the same species. The plants are restricted

to the environs of the trail leading to the Sri Maha Mariamman (Goddess of Mercy) Indian temple, on the NW flanks of the Matang massif. The trail leads not only to the temple but also to the former site of the accommodation for staff and managers of Rajah Charles Brook's tea and coffee plantation, established in 1867. It is known that 'Vallombrosa', as Beccari named his house on Matang, was built on or close to this site. Furthermore, *P.B. 1783* was collected during Beccari's first ascent of Matang, on which excursion he specifically looked for, and located, a suitable site to build the house.

Prior to this, and subsequently, we have surveyed

much of the area of Matang that are known to have been accessible to Beccari, but have failed to locate further populations of this *Homalomena*. We are therefore confident that the living material described and illustrated here is conspecific with and topotypic to *O. Beccari P.B. 1783*. We are here describing this plant as *Homalomena matangae*.

*Homalomena matangae* belongs in the Giamensis Complex (Ng et al., 2011), and represents the second described species for the complex; the other is *H. giamensis* L.S.Tung, S.Y.Wong & P.C.Boyce (Tung et al. 2010). They may be keyed out as follows:

- 1a. Spathe exterior, especially the lower spathe, with conspicuous extrafloral nectaries drying pale brown; base of staminate zone about the same width as the top of the pistillate zone, transition between the zones gradual. Staminate portion of spadix with a constriction ca  $\frac{1}{4}$  way along from the base, coinciding with the spathe constriction, staminate flowers distal to constriction ill-defined. Pistillate zone fusiform. Spathe limb not hooded at pistillate anthesis. Inflorescences smelling of lemon. Sandstones, Matang ..... *H. matangae*
- 1b. Spathe exterior lacking extrafloral nectaries; base of staminate zone much narrower than top of pistillate zone, transition between the zones abrupt. Staminate portion of spadix with a constriction ca  $\frac{1}{2}$  way along from the base, not coinciding with the spathe constriction, staminate flowers distal to constriction well-defined. Pistillate zone cylindrical. Spathe limb hooded at pistillate anthesis. Inflorescences smelling of anise (anethol). Limestones, Siburan ..... *H. giamensis*

***Homalomena matangae*** Y.C. Hoe, S.Y. Wong & P.C. Boyce, **sp. nov.**

DIAGNOSIS: *Homalomenae giamensi similis, spatha extra nectariis extrafloralibus, zonae florum staminatorum basi zonae pistillatae apice latitudine aequanti, transitione inter ambo gradatim (non abrupta). Spadicis parte staminata constricta e basi in quarto parte inferiore (contra c. dimidia), flores staminati distaliter e constrictione male definiti et quoque in zona florum pistillatorum fusiforme (non cylindrica) differt. Homalomena matangae ad lapides arenarios restricta dum H. giamensis saxis calcareis obligata.*

TYPUS: Malaysia, Sarawak, Kuching, Matang, May 1865, *O. Beccari P.B. 1783* (holotypus, FI-B) (Figs. 1,2).

DESCRIPTION: Medium to moderately robust, evergreen, glabrous aromatic **herbs** to ca 110 cm tall. **Stem** pleionanthic, erect to decumbent with the active tip ascending, up to 5 cm thick, pale brown with the exposed axillary buds bright green, with conspic-

uous adventitious roots, these often penetrating the petiole bases of the active tip, internodes to ca 3.5 cm long. **Leaves** up to 10 together, modules starting with a conspicuous 2-keeled short-duration **prophyll**, this pale green, glossy; **petioles** erect to spreading, 54-73 cm long  $\times$  9-12 mm wide at mid-point, sub-terete with the distal-most portion very shallowly channelled and very weakly D-shaped, pulvinate  $\frac{1}{4}$ - $\frac{1}{2}$  way back from leaf blade insertion, glossy bright green with obscure and scattered longitudinal short pale green ridges; **petiolar sheath** 21-23 cm long, ca  $\frac{1}{3}$  of petiole length, persistent, equal at both sides, wings up to 9 mm wide, open, rounded to somewhat decurrent at apex, glossy medium green; **blade** broadly ovato-cordate to cordiform, ca 35 cm long  $\times$  ca 25 cm width, thinly rubbery-leathery, conspicuously quilted between the primary lateral veins, glossy bright green adaxially, somewhat paler abaxially, drying uniformly pale yellow, base cordate, posterior lobes subtriangular 12-16 cm long, obtuse, spreading, occasionally the inner margins slightly overlapping, tip obtuse to somewhat acuminate for ca 2 cm, ultimately mucronate for ca 3 mm, mucro dark brown; midrib raised